

## U. S. ENVIRONMENTAL PROTECTION AGENCY REGION 4

## SUPERFUND UPDATE - FACT SHEET

# BROWN'S DUMP SUPERFUND SITE JACKSONVILLE, DUVAL COUNTY, FLORIDA

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## **EPA CONTACT**

Please call, email or write with any questions...

Randa Chichakli Remedial Project Manager (404)562-8928 chichakli.randa@pa.gov

> US EPA Region 4 61 Forsyth St., SW Atlanta, GA 30303

#### Introduction

The United States Environmental Protection Agency (EPA) issues this Fact Sheet as part of its public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

The Fact Sheet summarizes information that can be found in greater detail in documents contained in the Administrative Record. The Record and an Information Repository for the Brown's Dump Site are at the following location:

> Clanzel Brown Community Center 4545 Moncrief Road Jacksonville, Florida 32205 (904)765-5282 Monday-Friday: 8:30am - 8:00pm

The Administrative Record and Information Repository are available to the public for viewing and copying.

# Site Description and Background

The former Brown's Dump site occupies approximately 50 acres north of West 33rd Street, west of Pearce Street, and south and east of Moncrief Creek in Jacksonville, Duval County, Florida (*see Figure 1: Brown's Dump Site*). From 1949 to 1953, the site was an operating landfill that was used to deposit ash from the City of Jacksonville's 5th & Cleveland municipal solid waste incinerator. The former property owner, Mr. Clinton Brown, stated that when the incinerator was not functioning, municipal waste was brought directly to the site. He also explained that the site was used as a hog farm before and after the dumping activities.

Approximately 14 acres of the site were obtained by the Duval County School Board through condemnation procedures in 1955. The dump was back-filled and the Mary McLeod Bethune Elementary School was built shortly after. A smaller section, about 2 acres in the northeastern portion of the site, was obtained by the JEA for the construction of an electrical substation. The site also includes residential areas such as Bessie Circle Apartments to the west of the elementary school, and Moncrief Village and Palm Terrace Apartment Complexes in the northern part of the site.

Ash is still present in various locations within the 50-acre area at depths varying from the surface to 22 feet below ground surface. Although ash varies in color, it is identified by the presence of glass and metal fragments and it is generally several inches to several feet in thickness across the site.

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# **Enforcement History**

(See Figure 2: Site Assessment Process)

The Brown's Dump site was first investigated by EPA in 1985 when a Preliminary Assessment (PA) was done. Also in 1985, environmental samples were taken and the site was ranked with EPA's Hazard Ranking System (HRS) to determine its eligibility for the National Priority List (NPL). The NPL is the list of the most toxic sites in the nation. The site was scored as a low priority, below 28.5, and therefore was not eligible for a Superfund cleanup.

In 1992, the HRS system was revised. In late 1993, the Brown's Dump site was re-evaluated using the revised HRS. Because of the direct contact threat from the soil, the site scored above 28.5 under the new HRS, and became an NPL caliber site, eligible to be cleaned up under Superfund.

In early 1995, EPA's Emergency Response and Removal Branch (ERRB) did an assessment of the site, and recommended more extensive sampling but determined an emergency removal was not necessary. During their assessment, ERRB installed a chain link fence to restrict access to highly contaminated soils on-site to the north of the school.

In mid-1995, it was agreed that FDEP would take the prime enforcement role for the investigation and cleanup of the site with technical assistance provided by EPA.

Under FDEP's lead, the Duval County School Board completed extensive sampling and prepared a Contamination Assessment Report (CAR) summarizing the results.

A 1996 CAR Addendum detailed two phases of interim measures that had been implemented, and additional sampling that had been performed. Interim measures included six-inch soil cover over specific areas of the school and near some residences, as well as the installation of new fencing and the repair of existing fencing.

In March and June of 1996, more efforts were made to determine the extent of the ash. It was discovered that ash extends beyond the school property: south of the school in some residential areas; west of the school in residential areas; north of the school across Moncrief Creek near residential areas; and northeast of the school in residential areas

### **Enforcement History (continued...)**

In July 1996, the City of Jacksonville completed a Health Evaluation and concluded that based on the blood lead tests done on children on or near the site, there is no apparent lead exposure or hazard due to living in the Brown's Dump area. The Health Evaluation recommended continuing blood lead testing, promoting community awareness about lead, and several interim measures for the site.

In December 1996, FDEP requested that EPA take the enforcement lead on the Brown's Dump site. In response to the City of Jacksonville's Health Evaluation report, EPA requested the Agency for Toxic Substances and Disease Registry (ATSDR) to perform a Health Consultation using existing data to evaluate the potential for health effects in children from exposure to lead in the soil at the Brown's Dump site. It concluded that based on the lead levels in the soil, portions of the site are a public health hazard. It also concluded that based on blood lead levels and the Integrated Exposure Uptake Biokinetic (IEUBK) model, children of the school and surrounding neighborhood do not appear to have been recently exposed to the most highly contaminated soil. The consultation recommended the extent of ash in the surrounding neighborhoods be determined, existing fences be repaired and maintained, and access be restricted to the most contaminated soil near Moncrief Creek.

In 1997 EPA conducted a series of sampling events, analyzing for metals, organics, pesticides/PCBs, and dioxins in soils, surface water, sediments, and groundwater. An Expanded Site Investigation (ESI) report was completed in March 1998 that presents the results, conclusions and recommendations for the site. Samples were taken to characterize the nature of contamination at the site and to determine if it has migrated from the site. The ESI concluded that surface soil, sediment, surface water, and groundwater have been impacted by releases originating from the Brown's Dump.

<u>Soil samples</u> were collected from on-site areas, which included the elementary school and residential areas. Inorganic, extractable organic, pesticides/PCBs, and dioxin/furan compounds were detected in surface soils. Lead levels above the EPA screening level were found in many samples ranging from 5 ppm to 9100 ppm. Arsenic, copper, benzoanthracene, benzofluoranthene, benzo-a-pyrene, and PCB-1260 were also found in soils above EPA screening levels.

<u>Groundwater samples</u> were collected from the surficial aquifer at the elementary school area and near the Bessie Circle cul-de-sac. Inorganic contaminants, including lead, aluminum and manganese were found above EPA screening levels in the groundwater samples.

<u>Surface water and sediment samples</u> were taken from Moncrief Creek. Sediment samples had elevated levels of several inorganics including lead, cadmium, copper, mercury, and zinc. Several extractable organic compounds and pesticides were also detected in the sediments.

Although groundwater and surface water contamination are of concern at the site, the primary concern is soil exposure to students of the school and residents living on and near the site. Based on these ESI results, further action under Superfund is recommended for the Brown's Dump site.

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## **Recent Activities**

In May 1999, EPA sent Special Notice Letters to the City of Jacksonville, Duval County School Board, and JEA identifying them as Potentially Responsible Parties (PRPs) to the Brown's Dump site. These PRPs were asked to voluntarily enter into an Administrative Order by Consent with EPA to perform a Remedial Investigation and a Feasibility Study for the site.

On September 1, 1999, EPA, the City of Jacksonville, Duval County School Board and JEA signed the Administrative Order by Consent, and work on the Remedial Investigation and Feasibility Study has begun.

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## **Future Activities**

(See Figure 3: Superfund Process)

The purpose of the Remedial Investigation (RI) is to determine the full nature and extent of contamination. The RI work plan will be presented to the community early next year.

When the RI is complete, a Feasibility Study (FS) will be done to evaluate possible cleanup alternatives for the site. On average, it takes 18 months to complete an RI/FS.

EPA will choose a remedy from this FS and propose it to the public for comment.

A final remedy will be chosen, taking into consideration public comments, and the site will be cleaned up

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EPA is currently developing a mailing list to keep the community informed of current and future activities related to the Brown's Dump Site.

Please send your name and address to EPA (at the address below) if you would like to be included on this mailing list.

Re: Brown's Dump mailing list US EPA Region 4 61 Forsyth St., SW Atlanta, GA 30303.

Figure: Brown's Dump Site

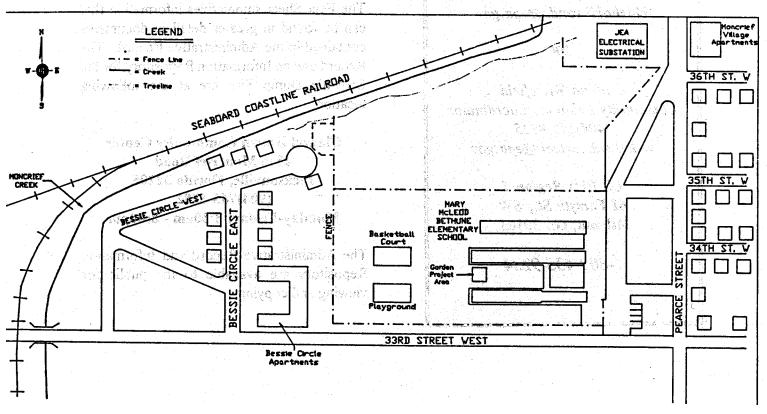


Figure 2: Site Assessment Process

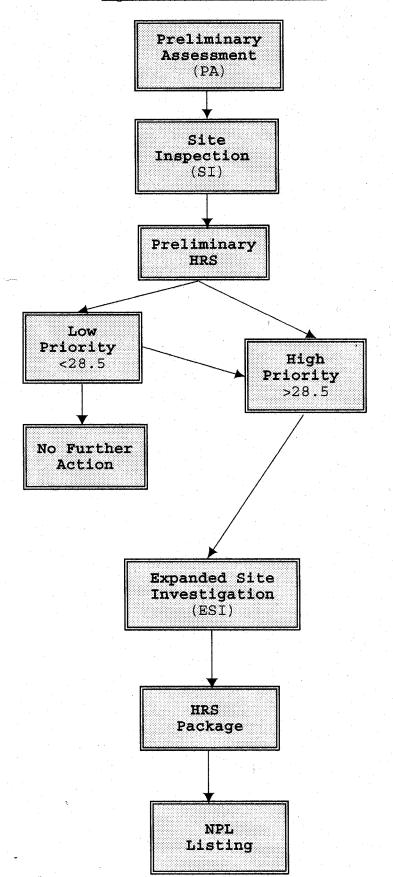


Figure 3: Superfund Process

